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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,423	11/28/2003	Gary Lorne MacIsaac	14534	7393

293 7590 05/23/2008

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EXAMINER	
YUEN, KAN	

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
05/23/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/722,423	MACISAAC, GARY LORNE	
	Examiner	Art Unit	
	KAN YUEN	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 February 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-38,40-42 and 44-75* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-38,40-42 and 44-75* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

Detailed Action

Response to Arguments

1. Applicant's arguments, see remark, filed 2/6/2008, with respect to the rejection(s) of claim(s) 1, 37, 38, 40 under 103 rejections have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Gupta et al. (Pub No.: 2004/0022332).

Claim Rejections - 35 USC § 103

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 37, 38, 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al. (Pub No.: 2004/0022332), in view of D'souza et al. (Pat No.: 6704289).

For claim 1, Gupta disclosed the method of receiving a first traffic waveform representing a time distribution of data volume in a first direction in the data communication system in a first period of time; receiving a second traffic waveform representing a time distribution of data volume in a second direction on the data communication system in a second period of time, and using the second traffic waveform as the reference waveform to produce the correlation value; producing a correlation value representing a correlation of the first traffic waveform with a reference waveform (Gupta et al. paragraphs 0071-0072, fig. 5). The diagram of CBDSP 130 shows a correlator multiplies two waveforms (first waveform, and second waveform) to be correlated and integrated the product over a period of time, resulting in a correlation sum. The sum provides a measure of how closely the two waveforms match each other over the integration time interval.

However, Gupta disclosed the method of producing a bandwidth anomaly signal when the correlation value satisfies a criterion. D'souza et al. disclosed the method of producing a bandwidth anomaly signal when the correlation value satisfies a criterion (D'souza et al. column 3, lines 45-67, column 4, lines 1-45, fig. 3). Upon determining the route cause, the event correlation mechanism 212 signals a trouble ticket system 218 to generate a trouble ticket 220 to notify network operations personnel to restore customer bandwidth by way of repair adjustment, modification or enhancement to the network. Thus, the trouble ticket is the bandwidth anomaly signal. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by D'souza et al. in the network of Gupta. The motivation for using the

method as taught by D’souza et al. in the network of Gupta being that it increases system efficiency.

Claims 37, 38, and 40 are rejected similar to claim 1.

5. Claims 2, 3, 41, 42, 44, 51, 54-61, 67, 70-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al. (Pub No.: 2004/0022332), in view of D’souza et al. (Pat No.: 6704289), as applied to claim 1 above, and further in view of An (Pub No.: 2001/0040919).

For claims 2, 41 Gupta et al. and D’souza et al. both silent on the method of producing the bandwidth anomaly signal comprises producing the denial of service attack signal when the correlation value is less than a reference value. An from the same or similar fields of endeavor teaches the method of producing the bandwidth anomaly signal comprises producing the denial of service attack signal when the correlation value is less than a reference value (An see paragraph 0025, lines 1-8, and paragraph 0026, lines 1-15). The unit 126 outputs the estimated data transmission rate signal to the outside. As the result, an initial bandwidth is allocated to a device based on the estimated data rate signal. The comparison result signal can be interpreted as the DDOS signal. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by An in the network of Gupta and D’souza et al. The motivation for using the method as taught by An in the network of Gupta and D’souza et al. being that it increases system efficiency.

Regarding claims 3, 42 An disclosed the method of producing the bandwidth anomaly signal comprises determining whether the correlation value is less than the reference value (An see paragraph 0025, lines 1-8, and paragraph 0026, lines 1-15). As shown, the unit 125 compares the value outputted from 124 with a reference error level. If the data from unit 124 is smaller than the reference error level, then the unit 125 will output the comparison result signal to unit 126.

Regarding claim 44, An disclosed the method of a first traffic waveform generator operable to receive a first set of traffic measurement values and to produce the first traffic waveform in response thereto (An see fig. 1, unit 120, and see paragraph 0020, lines 1-10, paragraph 0021, lines 1-10, and paragraph 0024, lines 1-20, and fig. 1, unit 120). As shown in unit 120, a unit 126 receives the filter value from 123, and a first comparison value from 125. Therefore, we can interpret that the sampler is the monitoring data unit.

Regarding claim 51, An disclosed the method of a communication interface operable to monitor data in the first direction and to produce the first set of traffic measurement values in response thereto (An see fig. 1, unit 120, and see paragraph 0020, lines 1-10, paragraph 0021, lines 1-10, and paragraph 0024, lines 1-20, and fig. 1, unit 120). As shown in unit 120, a unit 126 receives the filter value from 123, and a first comparison value from 125. Therefore, we can interpret that the sampler is the monitoring data unit.

Regarding claim 54, An disclosed the method of the communication interface includes at least one of a packet counter and an octet counter operable to count a

corresponding one of packets and octets of data in the first direction (An see paragraph 0021, lines 1-10). The detecting unit 121 has mean to counting up or down for transmitting stream data, therefore considered as counter.

Regarding claim 55, An disclosed the method of the processor circuit is configured to communicate with the communication interface to receive values produced by at least one of a the packet counter and the octet counter, the values representing the first set of traffic measurement values (An see paragraph 0021, lines 1-10). The detecting unit 121 has mean to counting up or down for transmitting stream data, therefore considered as counter.

Regarding claim 56, An disclosed the method of the processor circuit is configured to implement the communication interface (An see paragraph 0021, lines 1-10, and fig. 1 box 120). The unit 122 is the communication interface to receive values produce by the counter 121.

Regarding claim 57, An disclosed the method of a passive monitor operable to passively monitor the data in the first direction and to provide a copy of the data in the first direction to the communication interface (An paragraph 0021-0024, fig. 1 sampler 122).

Regarding claim 58, D'souza et al. disclosed the method of operable to transmit and receive data from a data communication system, the data communication apparatus comprising the apparatus of claim 51 and further comprising a signaling device for signaling an operator in response to the bandwidth anomaly signal (D'souza et al. column 3, lines 45-67, column 4, lines 1-45, fig. 3). Upon determining the route

cause, the event correlation mechanism 212 signals a trouble ticket system 218 to generate a trouble ticket 220 to notify network operations personnel to restore customer bandwidth by way of repair adjustment, modification or enhancement to the network. Thus, the trouble ticket is the bandwidth anomaly signal.

Regarding claim 59, D'souza et al. disclosed the method of operable to transmit and receive data from a data communication system, the data communication apparatus comprising the apparatus of claim 51 and further comprising a communication control device for controlling at least one of the transmission and reception of data from the data communication system in response to the bandwidth anomaly signal (D'souza et al. column 3, lines 45-67, column 4, lines 1-45, fig. 3). Upon determining the route cause, the event correlation mechanism 212 signals a trouble ticket system 218 to generate a trouble ticket 220 to notify network operations personnel to restore customer bandwidth by way of repair adjustment, modification or enhancement to the network. Thus, the trouble ticket is the bandwidth anomaly signal.

Regarding claim 60, An disclosed the method of a traffic waveform generator operable to receive the first and second sets of traffic measurement values and to produce the first and second traffic waveforms in response thereto (An see fig. 1, unit 120, and see paragraph 0020, lines 1-10, paragraph 0021, lines 1-10, and paragraph 0024, lines 1-20, and fig. 1, unit 120). As shown in unit 120, a unit 126 receives the filter value from 123, and a first comparison value from 125. Therefore, we can interpret that the sampler is the monitoring data unit.

Regarding claim 61, Gupta et al. disclosed the method of the processor is configured to receive first and second traffic waveforms representing first and second statistical measures of first and second time distributions respectively of data volume in first and second directions in the data communications system (Gupta et al. paragraph 0108, fig. 17).

Regarding claim 67, D'souza et al. disclosed the method of a communication interface operable to monitor data in the first and second directions and to produce the first and second sets of traffic measurement values respectively in response thereto (D'souza et al. column 3, lines 45-67, fig. 3).

Regarding claim 70, An disclosed the method of the communication interface includes at least one of a packet counter and an octet counter operable to count a corresponding one of packets and octets of data for each of the first and second directions (An see paragraph 0021, lines 1-10). The detecting unit 121 has mean to counting up or down for transmitting stream data, therefore considered as counter.

Regarding claim 71, An disclosed the method of the processor circuit is configured to communicate with the communication interface to receive values produced by at least one of the packet counter and the octet counter, the values representing the first and second sets of traffic measurement values (An see paragraph 0021, lines 1-10). The detecting unit 121 has mean to counting up or down for transmitting stream data, therefore considered as counter.

Regarding claim 72, An disclosed the method of the processor circuit is configured to implement the communication interface (An see paragraph 0021, lines 1-

10, and fig. 1 box 120). The unit 122 is the communication interface to receive values produce by the counter 121.

Regarding claim 73, An disclosed the method of a passive monitor operable to passively monitor the data in the first and second directions and to provide copies of the data to the communication interface (An paragraph 0021-0024, fig. 1 sampler 122).

Regarding claim 74, D'souza et al. disclosed the method of operable to transmit and receive data from a data communication system, the data communication apparatus comprising the apparatus of claim 40 and further comprising a signaling device for signaling an operator in response to the bandwidth anomaly signal (D'souza et al. column 3, lines 45-67, column 4, lines 1-45, fig. 3). Upon determining the route cause, the event correlation mechanism 212 signals a trouble ticket system 218 to generate a trouble ticket 220 to notify network operations personnel to restore customer bandwidth by way of repair adjustment, modification or enhancement to the network. Thus, the trouble ticket is the bandwidth anomaly signal.

Regarding claim 75, D'souza et al. disclosed the method of operable to transmit and receive data from a data communication system, the data communication apparatus comprising the apparatus of claim 40 and further comprising a communication control device for controlling at least one of the transmission and reception of data from the data communication system in response to the bandwidth anomaly signal (D'souza et al. column 3, lines 45-67, column 4, lines 1-45, fig. 3). Upon determining the route cause, the event correlation mechanism 212 signals a trouble ticket system 218 to generate a trouble ticket 220 to notify network operations personnel

to restore customer bandwidth by way of repair adjustment, modification or enhancement to the network. Thus, the trouble ticket is the bandwidth anomaly signal.

6. Claims 5, 6, 21, 22, 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al. (Pub No.: 2004/0022332), in view of D’souza et al. (Pat No.: 6704289), as applied to claim 1 above, and further in view of Kjeldsen et al. (Pat No.: 7206359).

For claim 5, Gupta et al. and D’souza et al. both silent on the method of generating the first traffic waveform in response to a first set of traffic measurement values. Kjeldsen et al. from the same or similar fields of endeavor teaches the method of generating the first traffic waveform in response to a first set of traffic measurement values (Kjeldsen et al. column 16, lines 65-67, column 17, lines 1-12). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Kjeldsen et al. in the network of Gupta and D’souza et al. The motivation for using the method as taught by Kjeldsen et al. in the network of Gupta and D’souza et al. being that it reduces used of bandwidth.

Regarding claim 6, Kjeldsen et al. disclosed the method of generating the first traffic waveform comprises subjecting the first set of traffic measurement values to a Discrete Wavelet Transform (Kjeldsen et al. column 16, lines 65-67, column 17, lines 1-12).

Regarding claim 21, Kjeldsen et al. disclosed the method of generating the first and second traffic waveforms in response to first and second sets of traffic

measurement values, representing traffic in the first and second directions on the data communication system, respectively (Kjeldsen et al. column 16, lines 65-67, column 17, lines 1-30).

Regarding claim 22, Gupta et al. disclosed the method of receiving the first and second traffic waveforms comprises receiving first and second waveforms representing first and second statistical measures of first and second time distributions respectively of data volume in first and second directions in the data communications system (Gupta et al. paragraph 0108, fig. 17).

Regarding claim 45, Kjeldsen et al. disclosed the method of the first traffic waveform generator is configured to produce the first traffic waveform by subjecting the first set of traffic measurement values to a Discrete Wavelet Transform (Kjeldsen et al. column 16, lines 65-67, column 17, lines 1-12).

7. Claims 7-12, 23-28, 46-50, 62-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al. (Pub No.: 2004/0022332), in view of D'souza et al. (Pat No.: 6704289), and Kjeldsen et al. (Pat No.: 7206359), as applied to claim 6 above, and further in view of Sahinoglu et al. (Pub No.: 2003/0021295).

For claim 7, Gupta et al., D'souza et al. and Kjeldsen et al. all silent on the method of subjecting the first set of traffic measurement values to the Discrete Wavelet Transform comprises using Haar wavelet filter coefficients in the Discrete Wavelet Transform. Sahinoglu et al. from the same or similar fields of endeavor teaches the method of subjecting the first set of traffic measurement values to the Discrete Wavelet

Transform comprises using Haar wavelet filter coefficients in the Discrete Wavelet Transform (Sahinoglu et al. see paragraph 0035, lines 1-6). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Sahinoglu et al. in the network of Gupta, Kjeldsen et al. and D'souza et al. The motivation for using the method as taught by Sahinoglu et al. in the network of Gupta, Kjeldsen et al. and D'souza et al. being that it reduces used of bandwidth.

Regarding claim 8, Sahinoglu et al. disclosed the method of generating the first traffic waveform comprises causing the Discrete Wavelet Transform to produce a first component, the first component representing the first traffic waveform (Sahinoglu et al. see paragraph 0016, lines 1-6). The DWT is applied to determine the frequency bands (waveform) of each vector.

Regarding claim 9, Gupta et al. disclosed the method of producing the correlation value comprises correlating the first component with the second waveform (Gupta et al. paragraphs 0071-0072, fig. 5). The diagram of CBDSP 130 shows a correlator multiplies two waveforms (first waveform, and second waveform) to be correlated and integrated the product over a period of time, resulting in a correlation sum. The sum provides a measure of how closely the two waveforms match each other over the integration time interval.

Regarding claim 10, Gupta et al. disclosed the method of using a processor circuit to generate the first traffic waveform and to correlate the first traffic waveform with the reference waveform (Gupta et al. paragraphs 0071-0072, fig. 5). The diagram

of CBDSP 130 shows a correlator multiplies two waveforms (first waveform, and second waveform) to be correlated and integrated the product over a period of time, resulting in a correlation sum. The sum provides a measure of how closely the two waveforms match each other over the integration time interval.

Regarding claim 11, Gupta et al. disclosed the method of the first traffic waveform represents a statistical measure of a time distribution of data volume in the first direction (Gupta et al. paragraphs 0071-0072, fig. 17).

Regarding claim 12, Kjeldsen et al. disclosed the method of monitoring data in the first direction and producing the first set of traffic measurement values in response thereto (Kjeldsen et al. column 16, lines 65-67, column 17, lines 1-12).

Regarding claim 23, Sahinoglu et al. disclosed the method of generating the first and second traffic waveforms comprises subjecting the first and second sets of traffic measurement values respectively, to a Discrete Wavelet Transform (Sahinoglu et al. see paragraph 0035, lines 1-6).

Regarding claim 24, Sahinoglu et al. disclosed the method of subjecting the first and second sets of traffic measurement values to the Discrete Wavelet Transform comprises using Haar wavelet filter coefficients in the Discrete Wavelet Transform (Sahinoglu et al. see paragraph 0035, lines 1-6).

Regarding claim 25, Sahinoglu et al. disclosed the method of causing the Discrete Wavelet Transform to produce a first component, representing the first traffic waveform and a second component representing the second traffic waveform

(Sahinoglu et al. see paragraph 0016, lines 1-6). The DWT is applied to determine the frequency bands (waveform) of each vector.

Regarding claim 26, Gupta et al. disclosed the method of producing the correlation value comprises correlating the first and second components (Gupta et al. paragraphs 0071-0072, fig. 5). The diagram of CBDSP 130 shows a correlator multiplies two waveforms (first waveform, and second waveform) to be correlated and integrated the product over a period of time, resulting in a correlation sum. The sum provides a measure of how closely the two waveforms match each other over the integration time interval.

Regarding claim 27, Gupta et al. disclosed the method of implementing a traffic waveform generator in a processor circuit used to produce the correlation value (Gupta et al. paragraphs 0071-0072, fig. 5). The diagram of CBDSP 130 shows a correlator multiplies two waveforms (first waveform, and second waveform) to be correlated and integrated the product over a period of time, resulting in a correlation sum.

Regarding claim 28, D'souza et al. disclosed the method of monitoring data in the first and second directions and producing the first and second sets of traffic measurement values respectively in response thereto (D'souza et al. column 3, lines 45-67, fig. 3).

Regarding claim 46, Sahinoglu et al. disclosed the method of the first traffic waveform generator is configured to use Haar wavelet filter coefficients in the Discrete Wavelet Transform (Sahinoglu et al. see paragraph 0035, lines 1-6).

Regarding claim 47, Sahinoglu et al. disclosed the method of the first traffic waveform generator is configured to cause the Discrete Wavelet Transform to produce a first component, the first component representing the first traffic waveform (Sahinoglu et al. see paragraph 0016, lines 1-6). The DWT is applied to determine the frequency bands (waveform) of each vector.

Regarding claim 48, Gupta et al. disclosed the method of the processor circuit is configured to produce the correlation value by correlating the first component with the second waveform (Gupta et al. paragraphs 0071-0072, fig. 5). The diagram of CBDSP 130 shows a correlator multiplies two waveforms (first waveform, and second waveform) to be correlated and integrated the product over a period of time, resulting in a correlation sum. The sum provides a measure of how closely the two waveforms match each other over the integration time interval.

Regarding claim 49, Gupta et al. disclosed the method of the processor circuit is configured to implement the first traffic waveform generator (Gupta et al. paragraphs 0071-0072, fig. 5). The diagram of CBDSP 130 shows a correlator multiplies two waveforms (first waveform, and second waveform) to be correlated and integrated the product over a period of time, resulting in a correlation sum.

Regarding claim 50, Gupta et al. disclosed the method of the first traffic waveform represents a statistical measure of a time distribution of data volume in the first direction (Gupta et al. paragraphs 0071-0072, fig. 17).

Regarding claim 62, Sahinoglu et al. disclosed the method of the traffic waveform generator is configured to produce the first and second traffic waveforms by subjecting

the first and second sets of traffic measurement values respectively, to a Discrete Wavelet Transform (Sahinoglu et al. see paragraph 0035, lines 1-6).

Regarding claim 63, Sahinoglu et al. disclosed the method of the traffic waveform generator is configured to use Haar wavelet filter coefficients in the Discrete Wavelet Transform (Sahinoglu et al. see paragraph 0035, lines 1-6).

Regarding claim 64, Sahinoglu et al. disclosed the method of the traffic waveform generator is configured to cause the Discrete Wavelet Transform to produce a first component, representing the first traffic waveform and a second component representing the second traffic waveform (Sahinoglu et al. see paragraph 0016, lines 1-6). The DWT is applied to determine the frequency bands (waveform) of each vector.

8. Claims 13, 14, 29, 30, 68, 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al. (Pub No.: 2004/0022332), in view of D'souza et al. (Pat No.: 6704289), Sahinoglu et al. (Pub No.: 2003/0021295), and Kjeldsen et al. (Pat No.: 7206359), as applied to claim 12 above, and further in view of Chen et al. (Pub No.: 2004/0017779).

For claim 13, Chen et al. disclosed the method of producing the first set of traffic measurement values comprises producing values representing a property of an Ethernet statistics group in a remote monitoring protocol (Chen et al. see paragraph 0002, lines 1-7). The Ethernet switch monitors remote equipment and to drive a warning message email message to remote equipment. The Ethernet switch can be the Ethernet statistics group, and the email is the remote monitoring protocol. Thus, it would have

been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Chen et al. in the network of Gupta, Kjeldsen et al. Sahinoglu et al. and D'souza et al. The motivation for using the method as taught by Chen et al. in the network of Gupta, Kjeldsen et al. Sahinoglu et al. and D'souza et al. being that it reduces used of bandwidth.

Regarding claim 14, Chen et al. disclosed the method of causing a processor circuit operable to produce the first traffic waveform to communicate with a communication interface to receive the values representing the property of an Ethernet statistics group (Chen et al. see paragraph 0002, lines 1-7).

Regarding claim 29, Chen et al. disclosed the method of producing the first and second sets of traffic measurement values comprises producing values representing a property of an Ethernet statistics group in a remote monitoring protocol, for each of the first and second directions (Chen et al. see paragraph 0002, lines 1-7). The Ethernet switch monitors remote equipment and to drive a warning message email message to remote equipment. The Ethernet switch can be the Ethernet statistics group, and the email is the remote monitoring protocol.

Regarding claim 30, Chen et al. disclosed the method of causing a processor circuit operable to produce the first and second traffic waveforms to communicate with a communication interface to receive the values representing a property of an Ethernet statistics group (Chen et al. see paragraph 0002, lines 1-7). The Ethernet switch monitors remote equipment and to drive a warning message email message to remote

equipment. The Ethernet switch can be the Ethernet statistics group, and the email is the remote monitoring protocol.

Regarding claim 68, Chen et al. disclosed the method of the communication interface produces values representing a property of an Ethernet statistics group in a remote monitoring protocol, for each of the first and second directions (Chen et al. see paragraph 0002, lines 1-7). The Ethernet switch monitors remote equipment and to drive a warning message email message to remote equipment. The Ethernet switch can be the Ethernet statistics group, and the email is the remote monitoring protocol.

Regarding claim 69, Chen et al. disclosed the method of the processor circuit is configured to communicate with the communication interface to receive the values representing a property of an Ethernet statistics group, for each of the first and second directions, the values representing the first and second sets of traffic measurement values respectively (Chen et al. see paragraph 0002, lines 1-7). The Ethernet switch monitors remote equipment and to drive a warning message email message to remote equipment. The Ethernet switch can be the Ethernet statistics group, and the email is the remote monitoring protocol.

9. Claims 15-20, 31-36, 52, 53, 65, 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gupta et al. (Pub No.: 2004/0022332), in view of D'souza et al. (Pat No.: 6704289), Sahinoglu et al. (Pub No.: 2003/0021295), Chen et al. (Pub No.:

2004/0017779), and Kjeldsen et al. (Pat No.: 7206359), as applied to claim 12 above, and further in view of An (Pub No.: 2001/0040919).

For claim 15, An disclosed the method of monitoring the data in the first direction comprises at least one of: counting packets and counting octets, in the first direction (An see paragraph 0021, lines 1-10). The detecting unit 121 has mean to counting up or down for transmitting stream data, therefore considered as counter. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by An in the network of Gupta, Kjeldsen et al. Chen et al. Sahinoglu et al. and D’souza et al. The motivation for using the method as taught by An in the network of Gupta, Kjeldsen et al. Chen et al. Sahinoglu et al. and D’souza et al. being that it reduces used of bandwidth.

Regarding claim 16, An disclosed the method of causing a processor circuit operable to produce the first traffic waveform to communicate with at least one of a packet counter and an octet counter to receive values representing the first set of traffic measurement values (An see paragraph 0020, lines 1-13, paragraph 0021, lines 1-10). The transmission rate detector 120 is the processor circuit. The detecting unit 121 has mean to counting up or down for transmitting stream data, therefore considered as counter.

Regarding claim 17, An disclosed the method of causing the processor circuit to implement at least one of the packet counter and the octet counter (An see paragraph 0021, lines 1-10). The detecting unit 121 has mean to counting up or down for transmitting stream data, therefore considered as counter.

Regarding claim 18, An disclosed the method of passively monitoring the data in the first direction (An see fig. 1, unit 120, and see paragraph 0020, lines 1-10, paragraph 0021, lines 1-10, and paragraph 0024, lines 1-20, and fig. 1, unit 120). As shown in unit 120, a unit 126 receives the filter value from 123, and a first comparison value from 125. Therefore, we can interpret that the sampler is the monitoring data unit.

Regarding claim 19, D'souza et al. disclosed the method of transmitting and receiving data from a data communication system, the data communication system method of claim 12 and further comprising signaling an operator in response to the bandwidth anomaly signal (D'souza et al. column 3, lines 45-67, column 4, lines 1-45, fig. 3). Upon determining the route cause, the event correlation mechanism 212 signals a trouble ticket system 218 to generate a trouble ticket 220 to notify network operations personnel to restore customer bandwidth by way of repair adjustment, modification or enhancement to the network. Thus, the trouble ticket is the bandwidth anomaly signal.

Regarding claim 20, D'souza et al. disclosed the method of transmitting and receiving data from a data communication system, the data communication system method of claim 12 and further comprising controlling at least one of transmission and reception of data from the data communication system in response to the bandwidth anomaly signal (D'souza et al. column 3, lines 45-67, column 4, lines 1-45, fig. 3). Upon determining the route cause, the event correlation mechanism 212 signals a trouble ticket system 218 to generate a trouble ticket 220 to notify network operations personnel to restore customer bandwidth by way of repair adjustment, modification or enhancement to the network. Thus, the trouble ticket is the bandwidth anomaly signal.

Regarding claim 31, An disclosed the method of monitoring the data comprises at least one of: packet counters and octet counters in each of the first and second directions (An see paragraph 0021, lines 1-10). The detecting unit 121 has mean to counting up or down for transmitting stream data, therefore considered as counter.

Regarding claim 32, An disclosed the method of causing a processor circuit operable to produce the first and second traffic waveforms to communicate with at least one of a packet counter and an octet counter to receive values representing the first and second sets of traffic measurement value (An see paragraph 0020, lines 1-13, paragraph 0021, lines 1-10). The transmission rate detector 120 is the processor circuit. The detecting unit 121 has mean to counting up or down for transmitting stream data, therefore considered as counter.

Regarding claim 33, An disclosed the method of causing the processor circuit to implement at least one of the packet counter and the octet counter (An see paragraph 0021, lines 1-10).

Regarding claim 34, An disclosed the method of passively monitoring the data in the first and second directions (An see fig. 1, unit 120, and see paragraph 0020, lines 1-10, paragraph 0021, lines 1-10, and paragraph 0024, lines 1-20).

Regarding claim 35, D'souza et al. disclosed the method of transmitting and receiving data from a data communication system, the data communication method of claim 1 and further comprising signaling an operator in response to the bandwidth anomaly signal (D'souza et al. column 3, lines 45-67, column 4, lines 1-45, fig. 3). Upon determining the route cause, the event correlation mechanism 212 signals a trouble

ticket system 218 to generate a trouble ticket 220 to notify network operations personnel to restore customer bandwidth by way of repair adjustment, modification or enhancement to the network. Thus, the trouble ticket is the bandwidth anomaly signal.

Regarding claim 36, D'souza et al. disclosed the method of transmitting and receiving data from a data communication system, the data communication method of claim 1 and further comprising controlling at least one of the transmission and reception of data from the data communication system in response to the bandwidth anomaly signal (D'souza et al. column 3, lines 45-67, column 4, lines 1-45, fig. 3). Upon determining the route cause, the event correlation mechanism 212 signals a trouble ticket system 218 to generate a trouble ticket 220 to notify network operations personnel to restore customer bandwidth by way of repair adjustment, modification or enhancement to the network. Thus, the trouble ticket is the bandwidth anomaly signal.

Regarding claim 52, Chen et al. disclosed the method of the communication interface produces values representing a property of an Ethernet statistics group in a remote monitoring protocol (Chen et al. see paragraph 0002, lines 1-7). The Ethernet switch monitors remote equipment and to drive a warning message email message to remote equipment. The Ethernet switch can be the Ethernet statistics group, and the email is the remote monitoring protocol.

Regarding claim 53, Chen et al. disclosed the method of the processor circuit is configured to communicate with the communication interface to receive the values representing a property of an Ethernet statistics group, the values representing the first set of traffic measurement values (Chen et al. see paragraph 0002, lines 1-7). The

Ethernet switch monitors remote equipment and to drive a warning message email message to remote equipment. The Ethernet switch can be the Ethernet statistics group, and the email is the remote monitoring protocol.

Regarding claim 65, An disclosed the method of the processor circuit is configured to produce the correlation value by correlating the first and second components (An see fig. 1, unit 120, and see paragraph 0020, lines 1-10, paragraph 0021, lines 1-10, and paragraph 0024, lines 1-20, and fig. 1, unit 120). As shown in unit 120, a unit 126 receives the filter value from 123, and a first comparison value from 125. Therefore, we can interpret that the sample value is the first component.

Regarding claim 66, An disclosed the method of the processor circuit is configured to implement the traffic waveform generator (An see fig. 1, unit 120, and see paragraph 0023, lines 1-8, and paragraph 0024, lines 1-20). As shown in the reference, a bit stream data is received at 121, and through 122, and 123. The unit 124 received a sample value from 122, and a filter value from 123. Then, unit 124 takes the difference between both values, and output a result signal. Therefore, we can interpret that the result signal (first waveform) is generated based on sample and filtered values.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAN YUEN whose telephone number is (571)270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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